

USGS-NPS Vegetation Mapping Program
Wupatki National Monument

Atriplex canescens Desert Wash Shrubland [Provisional]

MAP CLASS	Wupatki Wash System, Fourwing Saltbush Upland Drainageways
COMMON NAME	Fourwing Saltbush Desert Wash Shrubland
PHYSIOGNOMIC CLASS	Shrubland (III)
PHYSIOGNOMIC SUBCLASS	Evergreen shrubland (III.A)
PHYSIOGNOMIC GROUP	Extremely xeromorphic evergreen shrubland (III.A.5)
PHYSIOGNOMIC SUBGROUP	Natural/Semi-natural (III.A.5.N)
FORMATION	Facultatively deciduous extremely xeromorphic subdesert shrubland (III.A.5.N.b)
ALLIANCE	<i>Atriplex canescens</i> Shrubland Alliance

CLASSIFICATION CONFIDENCE LEVEL Weak

USFS WETLAND SYSTEM Upland

RANGE

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Fourwing Saltbush Desert Wash Shrubland is the most common association within the wash system at Wupatki NM. This association was only located from our relevé data within Wupatki NM; however, additional sampling may identify occurrences outside of the National Monument boundaries. Within Wupatki NM it was located in Citadel Wash, in the run off area south of Crack-in-rock Road, and in side washes near Wupatki Ruins.

ENVIRONMENTAL DESCRIPTION

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Based on our four relevés, this association's elevation ranged from 4,429-4,856 ft (1,350-1,480 m) (average 4,636 ft/1,413 m) and occurred mainly on flat or gentle inclines from 3-10% (average 5.5%). This association occurs in washes with cinder and sandstone substrate.

MOST ABUNDANT SPECIES

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<u>Stratum</u>	<u>Species</u>
Shrub	<i>Atriplex canescens</i>

ASSOCIATED SPECIES

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Artemisia dracunculus, *Artemisia filifolia*, *Ephedra torreyana*, *Ephedra viridis*, *Ericameria nauseosus*, *Gutierrezia sarothrae*, *Lycium andersoni*, *Muhlenbergia porteri*, *Sphaeralcea parvifolia*, *Sporobolus contractus*, *Stanleya pinnata*

VEGETATION DESCRIPTION

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Fourwing Saltbush Desert Wash Shrubland total vegetation cover ranges from 14-25% (average 20%) with 15-24% (average 19%) absolute cover in the shrub layer and 1-7% (average 3%) absolute cover in the herbaceous layer. The total species diversity ranged from 7-17 species (average 13) within the 4 relevés sampled.

The shrub layer was dominated or co-dominated by *Atriplex canescens* with 4-16% absolute cover (average 8%). *Artemisia dracunculus* is often present in this wash association, with low to high cover 0-13% (average 4%). The herbaceous layer was low to sparse and not dominated by a single species.

CONSERVATION RANK G?

DATABASE CODE CEG003470

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MAP CLASSES

The association Fourwing Saltbush Desert Wash Shrubland is represented by map class Wupatki Wash System (map code 24) and Fourwing Saltbush Upland Drainageways (map code 18).

Wupatki Wash System consists of five associations: *Artemisia filifolia* – *Ephedra (torreyana, viridis)* Shrubland, *Atriplex canescens* / *Sporobolus airoides* Shrubland, *Atriplex canescens* Desert Wash Shrubland (Provisional), *Fallugia paradoxa* (*Atriplex canescens* – *Ephedra torreyana*) Cinder Shrubland, and *Sporobolus airoides* Herbaceous Vegetation. Each of these associations may predominate the wash depending on the site biotic and abiotic conditions.

The total area of Wupatki Wash System mapped within Wupatki NM is 1,384 ac (560 ha) within 182 polygons and the total area in the park environs is 939 ac (380 ha) within 123 polygons. The total area of Fourwing Saltbush Upland Drainageways mapped within Wupatki NM is 42 ac (17 ha) within 8 polygons and the total area in the park environs is 77 ac (31 ha) within 9 polygons.

Note:

This association is found in two different map classes:

- 1) [Fourwing Saltbrush Upland Drainageways](#)
- 2) [Wupatki Wash System](#)